

Species Tag:	34001	Name:	O-18-O
Version:	4		Molecular oxygen,
Date:	Jan. 2010		single substituted
Contributor:	Shanshan Yu		¹⁸ O isotope
	Brian Drouin		X ³ Σ _g ⁻ , v = 0
Lines Listed:	481	Q(300.0)=	461.0889
Freq. (GHz) <	9999	Q(225.0)=	345.7288
Max. J:	62	Q(150.0)=	230.4314
LOGSTR0=	-20.0	Q(75.00)=	115.2147
LOGSTR1=	-20.0	Q(37.50)=	57.6804
Isotope Corr.:	-2.691	Q(18.75)=	29.0178
Egy. (cm ⁻¹) >	0.0	Q(9.375)=	14.8626
μ _a =	magnetic	A=	
μ _b =		B=	40707.4
μ _c =		C=	

This is a combined JPL/CDMS catalog entry. The measurements are from

1. B.J Drouin et al., 2009, J. Quant. Spectrosc. Radiat. Transf. (in press).
2. M. Mizushima and S. Yamamoto, 1991, J. Mol. Spect. **148**, 447;
3. R. L. Crownover, F. C. De Lucia and E. Herbst, 1990, Astrophys. J. **349**, L29;
4. W. Steinbach and W. Gordy, 1975, Phys. Rev. **A11**, 729;
5. T. Amano and E. Hirota, 1974, J. Mol. Spect. **53**, 346;

When the same transition was measured by different groups, all measurements were included in the fit with their respective experimental accuracies as weights. Predictions above 3.3 THz should be viewed with caution. Intensities of magnetic dipole transitions have been calculated using the ¹⁶O₂ *g* values obtained from magnetic resonance by K. D. Bowers, R. A. Kamper, and C. D. Lustig, 1959, Proc. Roy. Soc. London **A251**, 565. The zero-frequency absorption is included but the frequency is set to a synthetic frequency of |*g*| J for the given level.